§ 141.859

24 hours of being notified of the positive result, unless the State extends the limit as provided in paragraph (a)(1) of this section. The system must continue to collect additional sets of repeat samples until either total coliforms are not detected in one complete set of repeat samples or the system determines that a coliform treatment trigger specified technique §141.859(a) has been exceeded as a result of a repeat sample being total coliform-positive and notifies the State. If a trigger identified in §141.859 is exceeded as a result of a routine sample being total coliform-positive, systems are required to conduct only one round of repeat monitoring for each total coliform-positive routine sample.

- (4) After a system collects a routine sample and before it learns the results of the analysis of that sample, if it collects another routine sample(s) from within five adjacent service connections of the initial sample, and the initial sample, after analysis, is found to contain total coliforms, then the system may count the subsequent sample(s) as a repeat sample instead of as a routine sample.
- (5) Results of all routine and repeat samples taken under §§141.854 through 141.858 not invalidated by the State must be used to determine whether a coliform treatment technique trigger specified in §141.859 has been exceeded.
- (b) Escherichia coli (E. coli) testing. (1) If any routine or repeat sample is total coliform-positive, the system must analyze that total coliform-positive culture medium to determine if E. coli are present. If E. coli are present, the system must notify the State by the end of the day when the system is notified of the test result, unless the system is notified of the result after the State office is closed and the State does not have either an after-hours phone line or an alternative notification procedure, in which case the system must notify the State before the end of the next business day.
- (2) The State has the discretion to allow a system, on a case-by-case basis, to forgo *E. coli* testing on a total coliform-positive sample if that system assumes that the total coliform-positive sample is *E. coli*-positive. Accordingly, the system must notify the State as

specified in paragraph (b)(1) of this section and the provisions of §141.63(c) apply.

§ 141.859 Coliform treatment technique triggers and assessment requirements for protection against potential fecal contamination.

- (a) Treatment technique triggers. Systems must conduct assessments in accordance with paragraph (b) of this section after exceeding treatment technique triggers in paragraphs (a)(1) and (a)(2) of this section.
- (1) Level 1 treatment technique trig-
- (i) For systems taking 40 or more samples per month, the system exceeds 5.0% total coliform-positive samples for the month.
- (ii) For systems taking fewer than 40 samples per month, the system has two or more total coliform-positive samples in the same month.
- (iii) The system fails to take every required repeat sample after any single total coliform-positive sample.
- (2) Level 2 treatment technique triggers.
- (i) An $E.\ coli$ MCL violation, as specified in \$141.860(a).
- (ii) A second Level 1 trigger as defined in paragraph (a)(1) of this section, within a rolling 12-month period, unless the State has determined a likely reason that the samples that caused the first Level 1 treatment technique trigger were total coliform-positive and has established that the system has corrected the problem.
- (iii) For systems with approved annual monitoring, a Level 1 trigger in two consecutive years.
- (b) Requirements for assessments. (1) Systems must ensure that Level 1 and 2 assessments are conducted in order to identify the possible presence of sanitary defects and defects in distribution system coliform monitoring practices. Level 2 assessments must be conducted by parties approved by the State.
- (2) When conducting assessments, systems must ensure that the assessor evaluates minimum elements that include review and identification of inadequacies in sample sites; sampling protocol; sample processing; atypical events that could affect distributed water quality or indicate that distributed water quality was impaired;

Environmental Protection Agency

changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., small ground water systems); and existing water quality monitoring data. The system must conduct the assessment consistent with any State directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system.

- (3) Level 1 assessments. A system must conduct a Level 1 assessment consistent with State requirements if the system exceeds one of the treatment technique triggers in paragraph (a)(1) of this section.
- (i) The system must complete a Level 1 assessment as soon as practical after any trigger in paragraph (a)(1) of this section. In the completed assessment form, the system must describe sanitary defects detected, corrective actions completed, and a proposed timetable for any corrective actions not already completed. The assessment form may also note that no sanitary defects were identified. The system must submit the completed Level 1 assessment form to the State within 30 days after the system learns that it has exceeded a trigger.
- (ii) If the State reviews the completed Level 1 assessment and determines that the assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), the State must consult with the system. If the State requires revisions after consultation, the system must submit a revised assessment form to the State on an agreed-upon schedule not to exceed 30 days from the date of the consultation.
- (iii) Upon completion and submission of the assessment form by the system, the State must determine if the system has identified a likely cause for the Level 1 trigger and, if so, establish that the system has corrected the problem, or has included a schedule acceptable to the State for correcting the problem.
- (4) Level 2 assessments. A system must ensure that a Level 2 assessment con-

sistent with State requirements is conducted if the system exceeds one of the treatment technique triggers in paragraph (a)(2) of this section. The system must comply with any expedited actions or additional actions required by the State in the case of an *E. coli* MCL violation.

- (i) The system must ensure that a Level 2 assessment is completed by the State or by a party approved by the State as soon as practical after any trigger in paragraph (a)(2) of this section. The system must submit a completed Level 2 assessment form to the State within 30 days after the system learns that it has exceeded a trigger. The assessment form must describe sanitary defects detected, corrective actions completed, and a proposed timetable for any corrective actions not already completed. The assessment form may also note that no sanitary defects were identified.
- (ii) The system may conduct Level 2 assessments if the system has staff or management with the certification or qualifications specified by the State unless otherwise directed by the State.
- (iii) If the State reviews the completed Level 2 assessment and determines that the assessment is not sufficient (including any proposed timetable for any corrective actions not already completed), the State must consult with the system. If the State requires revisions after consultation, the system must submit a revised assessment form to the State on an agreed-upon schedule not to exceed 30 days.
- (iv) Upon completion and submission of the assessment form by the system, the State must determine if the system has identified a likely cause for the Level 2 trigger and determine whether the system has corrected the problem, or has included a schedule acceptable to the State for correcting the problem.
- (c) Corrective action. Systems must correct sanitary defects found through either Level 1 or 2 assessments conducted under paragraph (b) of this section. For corrections not completed by the time of submission of the assessment form, the system must complete the corrective action(s) in compliance with a timetable approved by the State in consultation with the system. The

§ 141.860

system must notify the State when each scheduled corrective action is completed.

(d) Consultation. At any time during the assessment or corrective action phase, either the water system or the State may request a consultation with the other party to determine the appropriate actions to be taken. The system may consult with the State on all relevant information that may impact on its ability to comply with a requirement of this subpart, including the method of accomplishment, an appropriate timeframe, and other relevant information.

§141.860 Violations.

- (a) $E.\ coli\ MCL\ Violation$. A system is in violation of the MCL for $E.\ coli$ when any of the conditions identified in paragraphs (a)(1) through (a)(4) of this section occur.
- (1) The system has an *E. coli*-positive repeat sample following a total coliform-positive routine sample.
- (2) The system has a total coliform-positive repeat sample following an *E. coli*-positive routine sample.
- (3) The system fails to take all required repeat samples following an E. coli-positive routine sample.
- (4) The system fails to test for *E. coli* when any repeat sample tests positive for total coliform.
- (b) Treatment technique violation. (1) A treatment technique violation occurs when a system exceeds a treatment technique trigger specified in §141.859(a) and then fails to conduct the required assessment or corrective actions within the timeframe specified in §141.859(b) and (c).
- (2) A treatment technique violation occurs when a seasonal system fails to complete a State-approved start-up procedure prior to serving water to the public.
- (c) Monitoring violations. (1) Failure to take every required routine or additional routine sample in a compliance period is a monitoring violation.
- (2) Failure to analyze for *E. coli* following a total coliform-positive routine sample is a monitoring violation.
- (d) Reporting violations. (1) Failure to submit a monitoring report or completed assessment form after a system properly conducts monitoring or as-

sessment in a timely manner is a reporting violation.

- (2) Failure to notify the State following an *E. coli*-positive sample as required by §141.858(b)(1) in a timely manner is a reporting violation.
- (3) Failure to submit certification of completion of State-approved start-up procedure by a seasonal system is a reporting violation.

§ 141.861 Reporting and recordkeeping.

- (a) Reporting. (1) E. coli.—(i) A system must notify the State by the end of the day when the system learns of an E. coli MCL violation, unless the system learns of the violation after the State office is closed and the State does not have either an after-hours phone line or an alternative notification procedure, in which case the system must notify the State before the end of the next business day, and notify the public in accordance with subpart Q of this part.
- (ii) A system must notify the State by the end of the day when the system is notified of an *E. coli*-positive routine sample, unless the system is notified of the result after the State office is closed and the State does not have either an after-hours phone line or an alternative notification procedure, in which case the system must notify the State before the end of the next business day.
- (2) A system that has violated the treatment technique for coliforms in §141.859 must report the violation to the State no later than the end of the next business day after it learns of the violation, and notify the public in accordance with subpart Q of this part.
- (3) A system required to conduct an assessment under the provisions of §141.859 of this part must submit the assessment report within 30 days. The system must notify the State in accordance with §141.859(c) when each scheduled corrective action is completed for corrections not completed by the time of submission of the assessment form.
- (4) A system that has failed to comply with a coliform monitoring requirement must report the monitoring violation to the State within 10 days